

REMARKS/ARGUMENTS

Claims 1-5, 7-10, 13-20, 22-26, 28-31, 34-42 and 44-62 are pending. Claims 1, 4-5, 7-10, 13-15, 17-19, 22, 24-26, 28-31, 34-37, 39-40 and 44 have been amended, claims 45-62 have been newly added, and claims 6, 11-12, 21, 27, 32-33, and 43 have been cancelled..

Reconsideration is respectfully requested.

1. Priority

The certified copy of the application filed on 3/29/06 is objected to because it is not legible. The Examiner states a new certified copy of the application must be re-filed as required by 35 U.S.C 119(b).

The certified copy of the application filed on 3/29/06 does have certain pages where some lines are blurred or cut off. However, the certified copy is also marked "BEST AVAILABLE COPY" on its face page.

35 U.S.C. 119(b)(3) states:

(3) The Director may require a certified copy of the original foreign application, specification, and drawings upon which it is based, a translation if not in the English language, and such other information as the Director considers necessary. Any such certification shall be made by the foreign intellectual property authority in which the foreign application was filed and show the date of the application and of the filing of the specification and other papers.

The copy of the application provided was properly certified by The Patent Office, and provides the information required by §119. Given that it was marked "BEST AVAILABLE COPY," it is respectfully submitted that it conforms with the requirements of §119. Approval of the certified copy is respectfully requested.

2. Specification

The specification has been amended to add section headings, as suggested by the Examiner.

3. Claim Objections

Claims 4-14, 19 and 25-35 were objected to for containing enumerated informalities. The claims have been either cancelled or amended to correct the enumerated informalities, including additional informalities not identified by the Examiner.

4. Rejection of Claims 6-14, 18-21, 27-35 and 39-42 Under §112

Claims 6-14, 18-21, 27-35 and 39-42 stand rejected under 35 U.S.C. 112, second paragraph.

Regarding claims 6, 11, 27 and 32, these claims have been cancelled, and to the extent their limitations have been incorporated into claims 1 or 22, the enumerated antecedent basis issues have been corrected.

Regarding claims 17 and 39, these claims have been amended to clarify the selection of memory arrangement is implemented at least partly based upon a selection of different versions of code to be executed.

Regarding claim 18 (and claim 40), the phrase “under program control” has been deleted. With respect to the goal set forth in the preambles of claims 18 and 40 (which have been amended to depend from claims 1 or 22 with similar preambles), the selecting is performed using cache-handling functions, whereby the method of processing image data is achieved with greater efficiency (see for example page 14, lines 18-21).

5. Rejection of Claims 22-44 Under §101

Claims 22-44 stand rejected under 35 U.S.C. 101 for being directed to software. Claims 27, 32-33 and 43 have been cancelled. Regarding the remaining claims, it is respectfully submitted they are directed to a system, not to software. The Examiner states that because page 2, lines 13-29 and page 13, lines 1-8 state that the invention can be implemented by software, that claims 22-43 are fairly interpreted as software. The Applicants respectfully traverse. Claims 22 and 40 for example recite that the system comprises a memory sub-system. Memory is not software. These claims further recite means for dynamically selecting the arrangement of image data according to certain criteria. Page 14, lines 13-14 describe a processor with firmware for implementing the claimed inventive process. Page 12, lines 2-4, discloses that the decoder can be implemented in dedicated hardware, or by a processor, or a combination of both. A processor configured to implement the invention and/or dedicated hardware is not software. Claims 23-24 and 26 are directed to specific memory configurations, which are not software. Therefore, it is respectfully submitted that claims 22-43 are not merely directed to software as stated by the Examiner.

Regarding claim 44, it has been amended to remove the reference to computer program product, and is now directed to a computer readable instruction medium, which is statutory subject matter. Support for this claim can be found on page 14, lines 13-15.

6. Rejection of Claims 1-21 Under §101

Claims 1-21 stand rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention, because the method is not properly tied to a machine implementation. Specifically, the Examiner states that the step of selecting lacks an explicitly recited structural tie.

Claim 1 has been amended to recite that the method includes “using dedicated hardware and/or a processor” to dynamically select the arrangement of the image data in the memory sub-system. Support for this amendment can be found on page 12, lines 2-4, which discloses that the

decoder can be implemented in dedicated hardware, or by a processor, or a combination of both. Claim 18 has been amended to depend from claim 1. It is therefore submitted that claims 1-21 as amended (except for claims 6, 11-12 and 21 which have been cancelled) are properly tied to a machine implementation, and thus are directed to statutory subject matter.

7. Rejection of Claims 1, 6, 22, 27 and 43-44 Under §102(b)

Claims 1, 6, 22, 27 and 43-44 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,874,995 (Naimpally). Claims 6, 27 and 43 have been cancelled.

Claim 1 recites a method of arranging image data representing a motion picture sequence within a memory sub-system in an image data processing system. The method includes dynamically selecting the arrangement of image data for successive pictures of said sequence in the memory sub-system according to at least one of three categories of characteristics: 1) measured characteristics of said image data, 2) measured characteristics of the performance of said processing system, and 3) known characteristics of subsequent processing of said image data within said image processing system.

Claim 1 has been amended to include some of the limitations of claims 6 and 11 (which have been cancelled). As amended, dynamic selection according to measured characteristics of the image data would require such selection be performed according to at least one of variability of motion vectors encoded within received data, picture type, and image resolution. Likewise, dynamic selection according to measured characteristics of the performance of the processing system would require at least one of data cache stall rates for a cache memory in the memory sub-system, processor utilization, quality of service or other qualitative measurements that are perceptible to an end user of content being processed, and bandwidth of a link feeding data into or out of said image processing system. Finally, dynamic selection according to known characteristics of subsequent processing of said image data would require at least one of encoded data size per picture of the sequence, and advance information relating to the content of the image stream contained in a data file. It should be noted that because claim 1 recites the

selection according to “at least one” of the three categories of characteristics, claim 1 would be met so long as one of the three categories of characteristics is present (so long as it is one of the enumerated characteristics for that category). Independent claims 22 and 44 have been similarly amended. Support for the claim amendments can be found on pages 15-17.

It is respectfully submitted that Naimpally fails to teach or suggest any of the aforementioned limitations. Instead, Naimpally discloses partitioning the memory in different configurations depending upon whether the signal is in an interlace format or a progressive format (see Abstract). This memory partitioning does not teach or suggest dynamically selecting the arrangement of image data for successive pictures in a memory sub-system according to the variability of motion vectors encoded within received data, the picture type, the image resolution, the data cache stall rates for a cache memory in the memory sub-system, the processor utilization, the quality of service or other qualitative measurements that are perceptible to an end user of content being processed, the bandwidth of a link feeding data into or out of said image processing system, the encoded data size per picture of the sequence, or the advance information relating to the content of the image stream contained in a data file.

It is therefore respectfully submitted that claims 1, 22 and 44 as amended are not anticipated by Naimpally.

8. Rejection of Claims 2-3, 9, 23-24, 30 and 37-39 Under §103(a)

Claims 2-3, 9, 23-24, 30 and 37-39 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Naimpally. These claims depend from claims 1 or 22, and are considered allowable for the reasons set forth in Part 7 above.

9. Newly Added Claims

Claims 45-62 have been newly added to individually cover the various characteristics for dynamically selecting the arrangement of image data in the memory sub-system as enumerated

in amended claims 1, 22 and 44. It is respectfully submitted that Naimpally fail to teach or suggest these characteristics used to dynamically select image data arrangements in memory.

For the foregoing reasons, it is respectfully submitted that the claims are in an allowable form, and action to that end is respectfully requested.

Respectfully submitted,

DLA PIPER US LLP

Dated: March 30, 2011

By: /Alan A. Limbach/
Alan A. Limbach
Reg. No. 39,749

Attorneys for Applicant(s)

Alan A. Limbach
DLA Piper LLP (US)
2000 University Avenue
East Palo Alto, CA 94303-2248
650-833-2433 (Direct)
650-833-2000 (Main)
650-687-1182 (Facsimile)
alan.limbach@dlapiper.com